

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A reversible axial piston machine having a cylinder drum which rotates about an axis of rotation and in the cylinder cutouts of which pistons, which are supported against an inclined surface, are movable, [[the]] a control angle (α_1 , α_2) of said inclined surface being adjustable by an adjusting device, the adjusting device having a control piston which adjusts the control angle (α_1 , α_2) in both pivotal directions and extends with a substantial direction component parallel to the direction of the axis of rotation of the cylinder drum, wherein [[the]] a zero position of the inclined surface, in which the inclined surface is oriented perpendicularly to the axis of rotation of the cylinder drum, can be set without play by a zero-position setting device; the zero-position setting device comprising a first adjusting rod which is positionably guided in a stepped cutout of the control piston, said cutout extending in the direction of the longitudinal axis of the control piston, and positions the control piston in the two directions of its longitudinal axis, wherein the control piston is guided in a hollow cylinder which has a first step on the inside and whereof a first opening, which is oriented in the direction of the inclined surface, is not closed in order to also enable an axial movement of the control piston outside the hollow cylinder, and whereof a second opening, which is oriented away from the pivot balance, is closed by a closing cover.

Claim 2 (Cancelled).

3. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 1, wherein the inclined surface is constructed on a rotatably mounted pivot balance.

Claim 4 (Cancelled)

5. (Currently Amended) A reversible axial piston machine according to [[Claim 4]] claim 1, wherein the position of the first adjusting rod outside the adjusting device is set by the first adjusting rod being guided out of the hollow cylinder of the adjusting device by way of the closing cover.

6. (Currently Amended) A reversible axial piston machine according to [[Claim 4]] claim 1, wherein the control piston is positioned in one of the two directions of the longitudinal axis of the control piston by a respective first and second spring plate which is each fixed on the first adjusting rod.

7. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 6, wherein the first spring plate is fixed on the first adjusting rod in that the first spring plate is pressed against the inside end face of a closing flange by the spring force of at least one pretensioned pressure spring located between the first and second spring plate, said closing flange being mounted on that end of the first adjusting rod which is located inside the hollow cylinder of the adjusting device.

8. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 7, wherein the second spring plate is fixed on the first adjusting rod in that the second spring plate is pressed against a sleeve by the spring force of the pretensioned pressure spring, said sleeve being guided between the second spring plate and the closing cover on the adjusting rod.

9. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 6, wherein the control piston is positioned in the direction of the first opening of the hollow cylinder in that the first spring plate is pressed against the end face of a second step of the cutout of the control piston as a result of the first adjusting rod being positioned in the direction of the first opening of the hollow cylinder.

10. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 6, wherein the control piston is positioned in the direction of the second opening of the hollow cylinder in that the second spring plate is pressed against a snap ring as a result of the first adjusting rod being positioned in the direction of the second opening of the hollow cylinder, said snap ring being guided in an annular groove along the side face of the cutout of the control piston in the region of the third opening of the cutout.

11. (Currently Amended) A reversible axial piston machine according to [[Claim 4]] claim 1, wherein the closing cover has an annular web whereof the external diameter corresponds to the internal diameter of the hollow cylinder from the second opening to the first step of the

hollow cylinder, and whereof the internal diameter corresponds to the internal diameter of the hollow cylinder from the first step to the first opening of the hollow cylinder.

12. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 11, wherein the closing cover is guided in the second opening of the hollow cylinder by means of its tubular web in such a way that a cavity is produced between the hollow cylinder, the closing cover and the control piston and, at the same time, the control piston is mounted on the inner side wall of the annular web of the closing cover and the inner side wall of the hollow cylinder between the first step and the first opening of the hollow cylinder.

13. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 12, wherein the control piston has, on its lateral surface in the region of the cavity, a widening which reaches to the inner side wall of the hollow cylinder and divides the cavity into a first control pressure chamber and a second control pressure chamber.

14. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 13, wherein the first and second control pressure chambers are each supplied with a control pressure by way of a respective control pressure opening in the wall of the hollow cylinder.

15. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 13, wherein the two side faces of the widening of the control piston serve as working surfaces for the two control pressures for displacing the control piston in the two directions along the longitudinal axis of the control piston.

16. (Currently Amended) A reversible axial piston machine according to [[Claim] claim 15], wherein with a defined control pressure, the control piston effects an equal control angle (α_1 , α_2) of the inclined surface in both pivotal directions as a result of the working surfaces of the control piston being of equal size.

17. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 3, wherein the control piston, which is axially movable in the direction of its longitudinal axis, is attached with form fit to the pivot balance by way of a slide block which is mounted in a groove of the control piston and has a cutout in which a journal connected to the pivot balance by way of a connecting arm is fixedly mounted.

18. (Currently Amended) A reversible axial piston machine according to [[Claim]] claim 7, wherein with an equal excursion of the control piston in one of the two directions along the longitudinal axis of the control piston, the pressure spring, which is fixed in the cutout of the control piston on the first adjusting rod, generates an equal restoring force for both directions of the excursion as a result of a defined control pressure.

19 (Currently Amended) A reversible axial piston machine according to [[Claim 4]] claim 1, wherein the axial excursion of the control piston along the longitudinal axis of the control piston is adjustably delimited by way of a second adjusting rod, which is guided out of the hollow cylinder of the adjusting device by way of the closing cover.